

IN THE CLAIMS:

Kindly rewrite Claims 1-31 as follows, in accordance with 37 C.F.R. § 1.121:

1. (currently amended) An isolated strain of *Methylophilus methylotrophus* having L- lysine-producing ability, wherein dihydrodipicolinate synthase activity is enhanced as compared to a wild-type *Methylophilus methylotrophus* strain, and wherein said dihydrodipicolinate synthase is selected from the group consisting of:

a) a protein encoded by ~~the a DNA sequence depicted in a nucleotide sequence~~ comprising nucleotides ~~numbers~~ 1268 to 2155 of SEQ ID NO:9; and

b) a protein having dihydrodipicolinate synthase activity and encoded by ~~the a~~ DNA ~~sequence~~ comprising nucleotide numbers 1268 to 2155 of SEQ ID NO:9, except that substitution, deletion, or addition, ~~or inversion~~ of one to 10 amino acids is present in the amino acid sequence of said protein.

2. (currently amended) The isolated strain according to claim_7, wherein the L-amino acid is L-lysine.

3. (cancelled)

4. (cancelled)

5. (currently amended) An isolated strain of *Methylophilus methylotrophus* having L-lysine-producing ability, wherein dihydrodipicolinate synthase activity and aspartokinase activity are enhanced as compared to a wild-type *Methylophilus methylotrophus* strain, and wherein said dihydrodipicolinate synthase is selected from the group consisting of:

a) a protein encoded by ~~the a DNA sequence depicted in a nucleotide sequence~~ comprising nucleotides ~~numbers~~ 1268 to 2155 of SEQ ID NO:9; and

b) a protein having dihydrodipicolinate synthase activity and encoded by ~~the a~~ DNA ~~sequence~~ comprising nucleotides ~~numbers~~ 1268 to 2155 of SEQ ID NO:9, except that substitution, deletion, or addition, ~~or inversion~~ of one to 10 amino acids is present in the amino acid sequence of said protein,

and wherein said aspartokinase is selected from the group consisting of:

a) a protein encoded by ~~the a DNA sequence depicted in a nucleotide sequence~~

comprising nucleotides ~~numbers~~ 510 to 1736 of SEQ ID NO:5; and

b) a protein having aspartokinase activity and encoded by ~~the a DNA sequence~~ comprising nucleotides ~~numbers~~ 510 to 1736 of SEQ ID NO:5 , except that substitution, deletion, addition, or inversion of one to 10 amino acids is present in the amino acid sequence of said protein.

6. (cancelled)

7. (currently amended) An isolated strain of *Methylophilus methylotrophus* having L-amino acid-producing ability, wherein aspartokinase activity is enhanced as compared to wild-type *Methylophilus methylotrophus* strain, and wherein said aspartokinase is selected from the group consisting of:

a) a protein encoded by ~~the a DNA sequence depicted in a nucleotide sequence~~ comprising nucleotides ~~numbers~~ 510 to 1736 of SEQ ID NO:5; and

b) a protein having aspartokinase activity and encoded by ~~the a DNA sequence~~ comprising nucleotides ~~numbers~~ 510 to 1736 of SEQ ID NO:5 , except that substitution, deletion, or addition, ~~or inversion~~ of one to 10 amino acids is present in the amino acid sequence of said protein.

8. (previously presented) The isolated strain according to claim 5, wherein an activity or activities of one, two, or three of enzymes selected from the group consisting of aspartic acid semialdehyde dehydrogenase, dihydrodipicolinate reductase and diaminopimelate decarboxylase is/are enhanced as compared to a wild-type *Methylophilus methylotrophus* strain.

9. (currently amended) The isolated strain according to claim 5, wherein the dihydrodipicolinate synthase activity and the aspartokinase activity are enhanced as compared to a wild-type *Methylophilus methylotrophus* strain by ~~introducing into cells a DNA sequence~~ transformation with a DNA coding for said dihydrodipicolinate synthase and a DNA ~~sequence~~ coding for said aspartokinase.

10. (previously presented) The isolated strain according to claim 7, wherein activities of homoserine dehydrogenase, homoserine kinase and threonine synthase are enhanced as compared to wild-type *Methylophilus methylotrophus* strain, and wherein said isolated strain has L-threonine-producing ability.

11. (cancelled)

12. (previously presented) A method for producing L-lysine, which comprises culturing said strain as defined in claim 1 in a medium, accumulating said L-lysine in said medium, and collecting the L-lysine from said medium.

13. (original) The method according to claim 12, wherein the medium contains methanol as a main carbon source.

14. (withdrawn) A method for producing bacterial cells of a *Methylophilus* bacterium with an increased content of an L-amino acid, which comprises culturing a *Methylophilus* bacterium as defined in claim 1 in a medium.

15. (withdrawn) A method for producing bacterial cells of the *Methylophilus* bacterium according to claim 14, wherein the L-amino acid is L-lysine.

16. (currently amended) An isolated DNA which codes for a protein selected from the group consisting of:

- (A) a protein comprising the amino acid sequence of SEQ ID NO: 6, and
- (B) a protein comprising ~~an~~the amino acid sequence of SEQ ID NO:6 except that substitution, deletion, insertion, or addition, ~~or inversion~~ of one to 10 amino acids in said amino acid sequence is present, and wherein said protein has aspartokinase activity.

17. (currently amended) The DNA according to claim 16, wherein said DNA is selected from the group consisting of:

- (a) a DNA comprising the nucleotides ~~sequence of the nucleotide numbers~~

510 to 1736 of SEQ ID NO:5; and

(b) a DNA having the nucleotides ~~sequence of the nucleotide numbers~~ 510 to 1736 of SEQ ID NO:5, except that substitution, deletion, or addition, ~~or inversion~~ of one to 10 amino acids is present in the amino acid sequence of a protein encoded by said DNA, and wherein said DNA codes for a protein having aspartokinase activity.

18. (withdrawn) The DNA which codes for a protein defined in the following (C) or (D):

(C) a protein which has the amino acid sequence of SEQ ID NO: 8, or

(D) a protein which has an amino acid sequences of SEQ ID NO:8 including substitution, deletion, insertion, addition, or inversion of one or several amino acids, and has aspartic acid semialdehyde dehydrogenase activity.

19. (withdrawn) The DNA according to claim 18, which is a DNA defined in the following (c) or (d):

(c) a DNA which has a nucleotide sequence comprising the nucleotide sequence of the nucleotide numbers 98 to 1207 of SEQ ID NO:7; or

(d) a DNA which is hybridizable with a probe having the nucleotide sequence of the nucleotide numbers 98 to 1207 of SEQ ID NO:7 or a part thereof under a stringent condition, and codes for a protein having aspartic acid semialdehyde dehydrogenase activity.

20. (currently amended) An isolated DNA which codes for a protein selected from the group consisting of:

(E) a protein comprising the amino acid sequence of SEQ ID NO:10, and

(F) a protein comprising ~~an~~ the amino acid sequence of SEQ ID NO:10 except that substitution, deletion, insertion, or addition, ~~or inversion~~ of one to 10 amino acids in said amino acid sequence is present, and wherein said protein has dihydrodipicolinate synthase activity.

21. (currently amended) The DNA according to claim 20, wherein said DNA is selected from the group consisting of:

(e) a DNA comprising the nucleotides ~~sequence of the nucleotide numbers~~ 1268 to 2155 of SEQ ID NO:9; and

(f) a DNA having the nucleotides ~~sequence of the nucleotide numbers~~ 1268 to 2155 of SEQ ID NO:9 except that substitution, deletion, or addition, ~~or inversion~~ of one to 10 amino acids is present in the amino acid sequence of a protein encoded by said DNA, and wherein said DNA codes for a protein having dihydrodipicolinate synthase activity.

22. (withdrawn) The DNA which codes for a protein defined in the following (G) or (H):

(G) a protein which has the amino acid sequence of SEQ ID NO:12, or

(H) a protein which has an amino acid sequences of SEQ ID NO:12 including substitution, deletion, insertion, addition, or inversion of one or several amino acids, and has dihydrodipicolinate reductase activity.

23. (withdrawn) The DNA according to claim 22, which is a DNA defined in the following (g) or (h):

(g) a DNA which has a nucleotide sequence comprising the nucleotide sequence of the nucleotide numbers 2080 to 2883 of SEQ ID NO:11 or

(h) a DNA which is hybridizable with a probe having the nucleotide sequence of the nucleotide numbers 2080 to 2883 of SEQ ID NO:11 or a part thereof under a stringent condition, and codes for a protein having dihydrodipicolinate reductase activity.

24. (withdrawn) The DNA which codes for a protein defined in the following (I) or (J):

(I) a protein which has the amino acid sequence of SEQ ID NO:14, or

(J) a protein which has an amino acid sequences of SEQ ID NO:14 including substitution, deletion, insertion, addition, or inversion of one or several amino acids, and has diaminopimelate decarboxylase activity.

25. (withdrawn) The DNA according to claim 24, which is a DNA defined in the

following (i) or (j):

- (i) a DNA which has a nucleotide sequence comprising the nucleotide sequence of the nucleotide numbers 751 to 1995 of SEQ ID NO:13; or
- (j) a DNA which is hybridizable with a probe having the nucleotide sequence of the nucleotide numbers 751 to 1995 of SEQ ID NO:13 or a part thereof under a stringent condition, and codes for a protein having diaminopimelate decarboxylase activity.

26. (previously presented) The isolated strain according to claim 1, wherein an activity or activities of one, two, or three of enzymes selected from the group consisting of aspartic acid semialdehyde dehydrogenase, dihydrodipicolinate reductase and diaminopimelate decarboxylase is/are enhanced as compared to a wild-type *Methylophilus methylotrophus* strain.

27. (previously presented) The isolated strain according to claim 2, wherein an activity or activities of one, two, or three of enzymes selected from the group consisting of aspartic acid semialdehyde dehydrogenase, dihydrodipicolinate reductase and diaminopimelate decarboxylase is/are enhanced as compared to a wild-type *Methylophilus methylotrophus* strain.

28. (previously presented) A method for producing L-lysine, which comprises culturing said strain as defined in claim 5 in a medium, accumulating said L-lysine in said medium, and collecting the L-lysine from said medium.

29. (previously presented) The method according to claim 28, wherein the medium contains methanol as a main carbon source.

30. (previously presented) A method for producing an L-amino acid, which comprises culturing said strain as defined in claim 7 in a medium, accumulating said L-amino acid in said medium, and collecting the L-amino acid from said medium.

31. (previously presented) The method according to claim 30, wherein the

medium contains methanol as a main carbon source.

32. (new) The isolated strain of claim 1, wherein said activity is enhanced by a method selected from the group consisting of:

- a) increasing the copy number of said DNA in said strain,
 - b) placing multiple copies of said DNA on the chromosome of said strain,
- and
- c) replacing a native promoter with a stronger promoter upstream of said DNA.

33. (new) The isolated strain of claim 5, wherein said activities are enhanced by a method selected from the group consisting of:

- a) increasing the copy number of said DNA in said strain,
 - b) placing multiple copies of said DNA on the chromosome of said strain,
- and
- c) replacing a native promoter with a stronger promoter upstream of said DNA.

34. (new) The isolated strain of claim 7, wherein said activity is enhanced by a method selected from the group consisting of:

- a) increasing the copy number of said DNA in said strain,
 - b) placing multiple copies of said DNA on the chromosome of said strain,
- and
- c) replacing a native promoter with a stronger promoter upstream of said DNA.